

The listing of claims presented below replaces all prior versions and listings of claims in the application.

### Listing of Claims

1. (Cancel)
2. (Previously presented) The thin-film assembly according to claim 52, wherein via connections are provided in the printed circuit board for the electronic contacting of the electrodes through the base body of the printed circuit board.
3. (Previously presented) The thin-film assembly according to claim 52, wherein a feed through to the base electrode is provided in the printed circuit board directly below the base electrode.
4. (Previously presented) The thin-film assembly according to claim 52, wherein the smoothed conductor layer, over surface areas having the dimensions of  $20 \times 20 \mu\text{m}^2$  (micro-roughness), exhibits a maximum mean surface roughness 3 nm .
5. (Currently amended) The ~~A~~ thin-film assembly according to claim 52 ~~†~~, wherein ~~characterized in that~~ a contact layer (22) is also provided below the top electrode (9).

6. (Previously presented) The thin-film assembly according to claim 52, wherein the contact layer also constitutes a passivation layer for the electrode.
7. (Previously presented) The thin-film assembly according to claim 52, wherein the contact layer also constitutes a stabilization layer for the adherence between the electrode and the adjacent thin-film layer.
8. (Previously presented) The thin-film assembly according to claim 52, wherein the contact layer is a metallic layer.
9. (Previously presented) The thin-film assembly according to claim 52, wherein the contact layer is formed by a conductive suspension or solution.
10. (Previously presented) The thin-film assembly according to claim 52, wherein a thin-film passivation layer is applied on exposed base body zones uncovered from the conductor layer, said passivation layer preventing the contamination of the respective thin-film component by substances emerging from the base body.
11. (Previously presented) The thin-film assembly according to claim 10, wherein the passivation layer is made of silicon dioxide, a sol-gel system or an epoxy compound.
12. (Previously presented) The thin-film assembly according to claim 52, wherein the top

electrode and, optionally, also the contact layer provided therebelow are designed to be at least translucent.

13. (Previously presented) The thin-film assembly according to claim 12, wherein an electroluminescent device is provided as said thin-film component.

14. (Previously presented) The thin-film assembly according to claim 13, wherein local base electrodes having individual feed throughs are provided on the printed circuit board within an insulating grid structure, with a planar electroluminescent thin-film system as well as a planar, or strip-wisely or symbol-wisely patterned, top electrode being arranged thereabove.

15. (Previously presented) The thin-film assembly according to claim 12, wherein a light-emitting diode is provided as said thin-film component.

16. (Previously presented) The thin-film assembly according to claim 12, wherein a photovoltaic assembly is provided as said thin-film component.

17. (Previously presented) The thin-film assembly according to claim 52, wherein a sensor, in particular an optical sensor or a temperature sensor, is provided as said thin-film component.

18. (Previously presented) The thin-film assembly according to claim 52, wherein a diode is provided as said thin-film component.

19. (Previously presented) The thin-film assembly according to claim 52 , wherein a transistor, in particular a field-effect transistor, is provided as said thin-film component.

20. (Previously presented) The thin-film assembly according to claim 52, wherein a snubber is provided as said thin-film component.

21. (Previously presented) The thin-film assembly according to claim 52 , wherein a resistor and/or a capacitor is provided as said thin-film component.

22. (Previously presented) The thin-film assembly according to claim 52 , wherein an encapsulation is associated with said thin-film component.

23. (Previously presented) The thin-film assembly according to claim 22, wherein said encapsulation is designed to be translucent or transparent.

24. (Currently amended) The thin-film assembly according to claim 22, wherein an enclosed gas volume (~~11~~) is present within said encapsulation(~~10~~).

25. (Previously presented) The thin-film assembly according to claim 23, wherein said encapsulation carries color converting and/or index matching layers in alignment with the local base electrodes.

26. (Previously presented) The thin-film assembly according to claim 52, wherein the printed circuit board is a flexible printed circuit board.

27. (Previously presented) The thin-film assembly according to claim 26, wherein the thin-film component has a flexible structure.

28. (Previously presented) The thin-film assembly according to claim 26, wherein an encapsulation is associated with said thin-film component, wherein said encapsulation is flexible.

29. (Previously presented) The thin-film assembly according to claim 28, wherein said encapsulation is attached to the thin-film component via an adhesion-promoting layer.

30. (Previously presented) The thin-film assembly according to claim 28, wherein said encapsulation, via a passivation layer serving as a barrier layer against moisture and air, is provided above the thin-film component, optionally above the adhesion-promoting layer.

31. (Previously presented) The thin-film assembly according to claim 28, wherein the thin-film component is provided in the neutral plane between the flexible printed circuit board and the flexible encapsulation.

32. (Previously presented) The thin-film assembly according to claim 26, wherein the flexible

printed circuit board is transparent or translucent.

33. (Previously presented) The thin-film assembly according to claim 26, wherein characterized by a configuration as a roll-up or folding sheeting material.

34. (Withdrawn) A method for producing a thin-film assembly including at least one electronic thin-film component which is applied on a substrate by thin-film technology, characterized in that a printed circuit board with an insulation-material base body and a metal coating as the conductor layer is used, that the conductor layer is at least locally smoothed, optionally upon attachment of a reinforcement, in order to form at least one base electrode for the thin-film component, and that a contact layer is applied on the base electrode by thin-film technology prior to attaching the remaining thin-film component thereabove.

35. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed by a mechanical method such as, e.g., lapping, grinding or polishing.

36. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed by electrochemical polishing.

37. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed by chemicomechanical polishing.

38. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed by chemical etching using, for instance, sulfuric acid, nitric acid or chromosulfuric acid.
39. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed by ion etching.
40. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed by bombardment with particles of individual or several atoms or molecules, such as, e.g, argon or argon clusters.
41. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is smoothed over surface areas having the dimensions of  $20 \times 20 \mu\text{m}^2$  to a maximum mean surface roughness of 10 nm and, preferably, 3 nm.
42. (Withdrawn) A method according to claim 34, characterized in that the conductor layer is electrochemically reinforced.
43. (Withdrawn) A method according to claim 34, characterized in that the printed circuit board is temporarily passivated by photolithography in the remaining areas prior to locally reinforcing the conductor layer.
44. (Withdrawn) A method according to claim 34, characterized in that base body areas

uncovered from the conductor layer are passivated by photolithographically assisted thin-film technology prior to attaching the remaining thin-film component.

45. (Withdrawn) A method according to claim 43, characterized in that a passivation layer is applied by thermal evaporation.

46. (Withdrawn) A method according to claim 43, characterized in that a passivation layer is applied by cold cathode coating.

47. (Withdrawn) A method according to claim 34, characterized in that a flexible printed circuit board is used as said substrate.

48. (Withdrawn) A method according to claim 47, characterized in that the flexible printed circuit board is temporarily supported, at least during smoothing, by a stiffened layer and/or by being guided over a table.

49. (Withdrawn) A method according to claim 47, characterized in that a flexible printed circuit board sheeting unwound from a reel is used.

50. (Withdrawn) A method according to claim 47, characterized in that a prefabricated flexible encapsulation sheeting is applied above the flexible printed circuit board sheeting provided with the thin-film component.

51. (Withdrawn) A method according to claim 50, characterized in that the encapsulation sheeting is unwound from a reel.

52. (Currently amended) A thin-film assembly comprising a substrate, said substrate being comprised of a printed circuit board including an insulation-material base body and a metal lamination as a conductor layer, wherein the insulation-material base body comprises an insulation material selected from the group consisting of epoxy resin, polyimide, polyethylene naphthalate, polyester or polyether etherketone, and including at least one electronic component applied on the substrate, wherein a base electrode formed by the conductor layer is provided on the substrate, on which base electrode layers belonging to the component and including an upper cover-electrode are arranged, wherein the component is applied by thin-film technology, and the conductor layer is smoothed at least on the location of the thin-film component, wherein the smoothed conductor layer over surface areas having the dimensions of  $20 \times 20 \mu\text{m}^2$  (micro-roughness), exhibits a maximum mean surface roughness of 10nm and a contact layer is applied by thin-film technology between the smoothed, optionally reinforced, conductor layer and the superimposed thin-film layers of the thin-film component, which contact layer is physically or chemically adsorbed directly on the surface of the base electrode, wherein the contact layer is arranged to passivate the conductor layer, and the contact layer further constitutes an electric contacting-promoting layer and an adhesion-improving layer for enhancing the electric contact between the conductor layer and the thin film component and for stabilizing the adherence of the thin film component on the conductor layer, respectively.

53. (Previously presented) The thin-film assembly according to claim 8 wherein the metallic layer is made of aluminum, gold, palladium platinum or a metal alloy, or carbon, or a semi-conductive compound.

54. (Previously presented) The thin-film assembly according to claim 9 wherein the conductive suspension or solution is based on polyaniline, polyethylene dioxithiophene/polystyrenesulfonic acid.

55. (Previously presented) The thin-film assembly according to claim 12 wherein the top electrode and, optionally, also the contact layer provided therebelow are designed to be transparent.

56. (Previously presented) The thin-film assembly according to claim 28 wherein said encapsulation a thin glass laminate or a polymer-oxide composite layer system.